

IN RE: Annual Review of Base Rates for Fuel) ORDER APPROVING
Costs of Duke Energy Carolinas, LLC) FUEL COST RECOVERY
) FACTORS

This matter comes before the Public Service Commission of South Carolina (“Commission”) on the annual review of base rates for fuel costs of Duke Energy Carolinas, LLC (“DEC” or the “Company”). The procedure followed by the Commission is set forth in S.C. Code Ann. § 58-27-865 (2015), which provides for annual hearings to allow the Commission and all interested parties to review the prudence of the fuel purchasing practices and policies of an electrical utility and for the Commission to determine if any adjustment in a utility’s fuel cost recovery mechanism is necessary and reasonable. Additionally, pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine in this proceeding whether an increase or decrease should be granted in the fuel cost component designed to recover the incremental or avoided costs incurred by the Company to implement the Distributed Energy Resource Program (“DERP”) previously approved by the Commission. The period under review in this Docket is June 1, 2017, through May 31, 2018 (“Review Period”).

A. Notice and Intervention

By letter dated March 14, 2018, the Clerk's Office of the Commission instructed the Company to publish a Notice of Hearing and Prefiled Testimony Deadlines ("Notice") in newspapers of general circulation and provide Proof of Publication on or before June 15, 2018. The letter also instructed the Company to furnish the Notice to each affected customer and provide a certification to the Commission, on or before June 15, 2018, that notification had been furnished. The Notice indicated the nature of the proceeding and advised all interested parties desiring participation in the scheduled proceeding of the manner and time in which to file appropriate pleadings. On April 10, 2018, the Company filed with the Commission affidavits demonstrating that the Notice was duly published, and, on May 21, 2018, the Company filed with the Commission a letter certifying that a copy of the Notice was furnished to the Company's retail customers in South Carolina with the instructions set forth in the Clerk's Office letters dated March 14, 2018.

Petitions to Intervene were filed by the South Carolina Solar Business Alliance, Incorporated ("SBA"), the South Carolina Energy Users Committee ("SCEUC"), the South Carolina Coastal Conservation League ("CCL"), Southern Alliance for Clean Energy ("SACE"), and Terry Scott Griffin. The South Carolina Office of Regulatory Staff ("ORS") is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B) (2015). In this Order, DEC, ORS, SBA, SCEUC, CCL, and SACE are collectively referred to as the "Parties" or sometimes individually as a "Party."

The Commission granted the petitions to intervene of SBA, SCEUC, CCL, and SACE, and denied the petition to intervene of Mr. Griffin.¹

On September 10, 2018, DEC, SCEUC, and ORS jointly filed a Stipulation (the “Stipulation”) in which these parties agreed to, among other things, the following: SCEUC and ORS do not oppose the Commission granting DEC’s proposed amount of recovery in this proceeding; the proposed fuel factors set forth in DEC Witness McGee’s Revised Exhibit 1, Line 13 are correct, appropriate, and consistent with S.C. Code Ann. § 58-27-865; the Distributed Energy Resource Program (“DERP”) incremental charges set forth in Exhibit 1 to the testimony of ORS Witness Johnson (as incorporated into Witness McGee’s Revised Exhibit 1, Line 18) are correct, appropriate, and consistent with the provisions of Act 236 of 2014; SCEUC withdraws its recommendation for additional reporting requirements contained in Section II of SCEUC Witness Kevin O’Donnell’s testimony; DEC will limit the total average bill increase to no more than 5 percent for the one-year billing period beginning October 1, 2018; in order to effect a cap of 5 percent on bill increases resulting from the fuel proceeding, DEC will reduce projected fuel costs by \$34 million during the billing period October 2018 through September 2019 and will defer recovery of the actual over/under recovery balance to October 1, 2019, through its 2019 fuel proceeding; DEC will charge and accrue interest monthly on the amount DEC would have billed but for the deferral, and the applicable interest rate used to calculate the carrying costs will be the 3-year U.S. Government Treasury Note, as reported in *The Wall Street Journal*, either in its printed

¹ See Order No. 2018-428, granting the Petition to Intervene filed on behalf of SBA; Order No. 2018-452, granting the Petition to Intervene filed on behalf of CCL and SACE; Order No. 2018-453, granting the Petition to Intervene filed on behalf of SCEUC; Order No. 2018-489, denying the Petition to Intervene filed by Mr. Griffin.

edition or on its website, plus an all-in spread of 65 basis points (0.65 percent), and the applicable period during which carrying costs will be applied begins October 1, 2018, and ends September 30, 2019; pursuant to S.C. Code Ann. § 58-27-865(F), DEC's achievement of a 92.5 percent net capacity factor for its nuclear units in a given review period creates a rebuttable presumption that it made every reasonable effort to minimize costs associated with the operation of its nuclear generation system, but that presumption does not preclude the ORS or other parties from examining the operation of the DEC nuclear generation system and offering evidence in an effort to rebut the presumption; with respect to the July 24, 2017, outage at Oconee Unit 3 ("Oconee 3 Outage"), the outage was not the result of unreasonable operation of the unit by DEC and the replacement costs should not be disallowed; ORS withdrew its recommendation in the direct testimonies and exhibits of Matthew Schellinger and Anthony Briseno that the Oconee Unit 3 Outage replacement costs be disallowed; DEC withdrew the rebuttal testimony of DEC witness Steven Capps; and ORS withdrew the surrebuttal testimony of ORS witness Matthew Schellinger.²

II. JURISDICTION OF THE COMMISSION

In accordance with S.C. Code Ann. § 58-27-140(1) (2015), the Commission may, upon petition, "ascertain and fix just and reasonable standards, classifications, regulations, practices or service to be furnished, imposed, observed, and followed by any or all electrical utilities." Further, S.C. Code Ann. § 58-27-865(B) (2015) states, in pertinent part, that "[u]pon conducting public hearings in accordance with law, the commission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs

² The Stipulation was entered into the record as Hearing Exhibit 1, and is attached hereto as Order Exhibit 1.

determined by the commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period.”

Consistent with the requirements of S.C. Code Ann. § 58-27-865(B), the Commission convened an evidentiary hearing to determine the reasonableness of the Company’s proposed increase in the base rate amount designed to recover fuel costs.

III. DISCUSSION OF THE HEARING AND CONCLUSIONS

The public evidentiary hearing in this matter was held on September 18, 2018, before this Commission with the Honorable Comer H. Randall presiding as Chairman. Representing the Parties and appearing before the Commission in this Docket were Frank R. Ellerbe, III, Esquire, and Samuel J. Wellborn, Esquire, for the Company; Lauren Joy Bowen, Esquire, and Stinson W. Ferguson, Esquire, for SACE and CCL; Scott Elliott, Esquire, for SCEUC; and Jeffrey M. Nelson, Esquire, and C. Lessie Hammonds, Esquire, for ORS.³

A. DEC Testimony

The Company presented the direct testimonies and exhibits of Joseph Miller, Jr., Steven Capps, Kenneth Church, Eric Grant, Kimberly McGee, Jason Martin, and Glen Snider; the rebuttal testimonies of Eric Grant, Glen Snider, and Kimberly McGee; and the supplemental testimony and

³ Richard Whitt, Esquire, and Timothy Rogers, Esquire, representatives for SBA, were granted permission from the Commission to be excused from attending the Hearing.

revised exhibits of Kimberly McGee via three (3) panels.⁴ The pre-filed direct, rebuttal, and supplemental testimonies of all Company witnesses were accepted into the record without objection, and the Company witnesses' pre-filed exhibits were marked as Hearing Exhibits 2 through 7, and were entered into the record of the case.⁵

Company Witness Miller testified regarding DEC's fossil/hydro/solar generation portfolio and changes made since the 2017 fuel cost recovery proceeding, as well as those expected in the near term; the performance of DEC's fossil/hydro/solar facilities during the Review Period; significant fossil/hydro/solar outages that occurred during the Review Period; and the Company's environmental compliance efforts.

Company Witness Capps testified regarding the performance of the Oconee Nuclear Station, McGuire Nuclear Station, and Catawba Nuclear Station during the Review Period. Witness Capps reported to the Commission that DEC achieved a net nuclear capacity factor,

⁴ Prior to the hearing, and without objection from the Parties, the Commission granted DEC and ORS permission to utilize panels for the presentations of witnesses. DEC Witnesses Joseph Miller, Jr. and Steven Capps were presented in the first panel; Witnesses Eric Grant and Kenneth Church were presented in the second panel; and Witnesses Jason D. Martin, Glen Snider, and Kimberly McGee were presented in the third panel. ORS Witnesses Anthony Briseno, Matthew Schellinger, and Sarah Johnson were presented via a single panel.

⁵ Composite Hearing Exhibit 2 consists of the public Exhibits 1 and 2, and confidential Exhibit 3 (to be maintained under seal) of Steven Capps; Composite Hearing Exhibit 3 consists of Exhibits 1 and 2 of Eric Grant; Composite Hearing Exhibit 4 consists of Exhibits 1 and 2 of Kenneth Church; Hearing Exhibit 5 consists of Exhibit 1 of Jason Martin; Composite Hearing Exhibit 6 consists of Exhibits 1 through 14 of Kimberly McGee as filed on July 27, 2018; and Composite Hearing Exhibit 7 consists of the Revised Exhibits 1, 3, 9, and 11 of Kimberly McGee as filed on September 10, 2018. Per the Stipulation, the rebuttal testimony of DEC witness Steven Capps was withdrawn. In Order No. 2018-565, the Commission granted DEC's motion to treat Exhibit 3 of DEC Witness Capps' testimony as confidential.

excluding reasonable outage time, of 101.53 percent for the review period, which is above the 92.5 percent capacity factor set forth in S.C. Code § 58-27-865 (2015).

Company Witness Church testified regarding DEC's nuclear fuel purchasing practices and costs for the Review Period, and described related changes expected for the October 1, 2018, to September 30, 2019, billing period.

Company Witness Grant testified regarding the Company's fossil fuel purchasing practices and costs for the Review Period, and described related changes expected for the October 1, 2018, to September 30, 2019, billing period.

Company Witness McGee testified regarding the Company's fuel-related costs, capacity-related costs, environmental costs, and the Company's DERP costs for the Review Period; the Company's projected fuel costs, capacity-related costs, environmental costs, and DERP costs for the forecast period of June 1, 2018, through September 30, 2018; and the Company's proposed fuel factors by customer class for the billing period of October 1, 2018, through September 30, 2019.

Witness McGee testified that the impact of the rates set forth in her direct testimony for an average residential customer using 1,000 kilowatt-hours ("kWh") per month would be—but for the two-year recovery contemplated in the Stipulation—an increase of \$4.75, or 4.2 percent; impacts for General Service (Non-Demand), Lighting, and General Service (Demand) vary by customer, but are increases of approximately 6.1 percent, 2.4 percent, and 8.0 percent, respectively. Witness McGee testified in support of the Stipulation and discussed the associated impact on customer rates. Witness McGee testified that the Stipulation limited the total average bill increase in the first billing year to no more than 5 percent by reducing projected fuel costs by \$34 million; the resulting revised average bill increase percentages for each customer class are 2.9 percent for

Residential, 3.2 percent for General Service, 1.4 percent for Lighting, and 5.0 percent for Industrial.

Company Witness Martin testified regarding DERP costs that are incorporated into the proposed fuel factors by Witness McGee. Witness Martin also testified to the nature of the DERP costs and changes to the DERP portfolio since the 2017 fuel proceeding.

Company Witness Snider testified regarding the Company's calculation of the components of the value of Net Energy Metering ("NEM") Distributed Energy Resources ("DER") (together, "NEM DER").

B. ORS Testimony

ORS presented the direct testimonies of Anthony Briseno, Matthew Schellinger, and Sarah Johnson via panel. The pre-filed direct testimonies of all ORS witnesses were accepted into the record without objection by the Parties, and the ORS witnesses' pre-filed exhibits were marked as Hearing Exhibits 11 through 13, and were entered into the record of the case.⁶

ORS Witness Briseno testified regarding the results of ORS Audit Staff's examination of DEC's books and records pertaining to DEC's operations under the Fuel Adjustment Clause for the Review Period and for the forecast period of June 1, 2018, through September 30, 2018.

⁶ Composite Hearing Exhibit 11 consists of Exhibits ADB-1 through ADB-10 of Anthony Briseno; Composite Hearing Exhibit 12 consists of Exhibits MPS-1 through MPS-11 of Matthew Schellinger; and Hearing Exhibit 13 consists of Exhibit SWJ-1 of Sarah Johnson. Pursuant to the Stipulation, ORS withdrew its recommendation in the direct testimonies and exhibits of Matthew Schellinger and Anthony Briseno that the Oconee Unit 3 Outage replacement costs be disallowed, and withdrew the surrebuttal testimony of ORS Witness Matthew Schellinger.

ORS Witness Johnson testified regarding the ORS's findings and examinations of the Company's DERP expenses for the Review Period, the estimated period of June 1, 2018, through September 30, 2018, and the billing period of October 1, 2018, through September 30, 2019.

ORS Witness Schellinger testified regarding DEC's fuel expenses and power plant operations for the Review Period, the estimated period of June 1, 2018, through September 30, 2018, and the billing period of October 1, 2018, through September 30, 2019.

C. SCEUC Testimony

SCEUC filed the direct and rebuttal testimony of Kevin O'Donnell.⁷ The pre-filed direct and surrebuttal testimonies of Witness O'Donnell were accepted into the record without objection by the Parties, and Witness O'Donnell's pre-filed exhibit, Exhibit KWO-1, was marked as Hearing Exhibit 8, and was entered into the record of the case.

Witness O'Donnell testified regarding the fuel reporting of DEC and regarding spreading DEC's recovery over a two-year period.⁸

D. SACE and CCL Testimony, Responsive Testimony, and Commission Conclusions

SACE and CCL presented the direct testimony and exhibits and surrebuttal testimony of Devi Glick. The pre-filed direct and surrebuttal testimonies and the exhibits of Witness Glick

⁷ Pursuant to the Stipulation, SCEUC requested that it be permitted to submit the pre-filed testimony of Witness O'Donnell into the record without Mr. O'Donnell being present at the hearing to testify. In the absence of objection, the Commission granted this request.

⁸ Pursuant to the Stipulation, SCEUC withdrew the recommendation for additional reporting requirements contained in § II of Mr. O'Donnell's direct testimony.

were accepted into the record without objection by the Parties, and Ms. Glick's pre-filed exhibits were marked as Hearing Exhibits 9 and 10 and were entered into the record of the case.⁹

The only contested issues in this proceeding were presented by Witness Glick. Ms. Glick made recommendations regarding the value of NEM DER set forth in Company Witness Snider's testimony. Each of these recommendations, DEC's response, and the Commission's conclusions regarding each recommendation are addressed as follows:

a. Witness Glick testified that, because it is possible to quantify avoided transmission and distribution costs, DEC should no longer use a placeholder value of zero for this category. Witness Glick referenced studies completed in other jurisdictions that assigned a value to avoided transmission and distribution capacity, and discussed potential approaches DEC could take to assign value to this component. Based on her analysis, Witness Glick recommended that DEC adopt a value of \$0.005028 per kWh for avoided transmission capacity costs.

In rebuttal, Witness Snider disagreed that NEM DER permitted the Company to avoid transmission and distribution investments. Witness Snider agreed with the Commission's finding in recent fuel proceedings that utilities "must design [their] transmission and distribution system so as to provide safe and reliable electric service, even when intermittent generation sources such as solar facilities and other small QFs are not producing power." Docket No. 2018-2-E, Order No. 2018-322 at 33; *see also* Docket No. 2018-1-E, Order No. 2018-456 at 9; Docket No. 2017-2-E, Order No. 2017-246 at 24. Witness Snider further testified that, given the intermittency, lack of

⁹ Composite Hearing Exhibit 9 consists of Exhibits DG-1 through DG-3, and the public version of DG-4, of Devi Glick; Hearing Exhibit 10 consists of the confidential Exhibit DG-4 of Ms. Glick. In Order No. 2018-603, the Commission granted SACE and CCL's motion to treat Exhibit DG-4 as confidential.

coincidence with peak demand, non-dispatchability, and uncertainty in NEM DER location and quantity, it is impossible for NEM DER to avoid transmission and distribution investments, and it is therefore not appropriate to assign avoided transmission or distribution benefits to NEM DER. Witness Snider further testified that NEM DER may actually drive additional investments in the distribution system, as a result of increasing the size of service transformers to accommodate reverse flow, additional monitoring equipment, and updating voltage control schemes. Additionally, Witness Snider testified that NEM DER may result in additional transmission expenses, rather than avoiding such expenses, if NEM DER is placed in areas where large amounts of utility scale solar are to be located. In response to Commission questions, witness Snider testified that the transmission generator interconnection queue is extensive, resulting in significant Company transmission planning resources dedicated to studying the backlog of solar qualifying facilities. He went on to explain that the Company is seeing the need for additional transmission investment, not less, to accommodate additional solar resources on the grid. Witness Snider further explained in testimony that, in locations where utility scale solar is already in place, NEM DER can actually result in additional transmission expenses as it increases the amount of generation that must be exported from the area. As such, Witness Snider argues that the assignment of an avoided transmission benefit would not be appropriate.

In surrebuttal, Witness Glick testified that Witness Snider's testimony focuses on the impact of NEM DER on the distribution system and does not accurately differentiate between impacts on the transmission system and distribution system. Witness Glick testified that NEM DER reduce the total load of electricity on the transmission system, which contributes to avoiding or deferring transmission system expenditures that would otherwise be needed. Witness Glick

further testified that solar facilities can act as a larger generator with a smooth generation profile when they are aggregated.

Although Witness Glick testified that it is possible to quantify avoided transmission and distribution costs, and therefore DEC should no longer use a placeholder value of zero for that category, the Commission agrees with Witness Snider that solar resources' intermittency, non-dispatchability, and non-coincidence with peak demand preclude the Company from relying on these resources in avoiding transmission and distribution investments. As we have previously found, utilities must design their transmission and distribution systems so as to provide safe and reliable electric service, including when intermittent, non-dispatchable generation sources such as solar facilities are not producing power. It would be inappropriate to assign a value to transmission and distribution costs, or to any category of costs, when NEM DER does not permit the Company to avoid such costs.

b. Witness Glick further testified that, because it is possible to quantify the avoided environmental costs of coal ash disposal, DEC should no longer use a placeholder value of zero for this category. Witness Glick testified that there are many environmental costs that can be avoided through the decreased use of conventional combustion technologies such as coal, oil, and natural gas, and that avoided coal ash disposal costs should be included in the avoided environmental cost component. Based on her analysis, Witness Glick recommended that DEC adopt a value of \$0.00002 per kWh for avoided coal ash costs.

In rebuttal, Witness Snider testified that variable operational costs associated with coal ash disposal are already included within the avoided energy component of the calculation of NEM DER. Witness Snider further testified that NEM DER will have no impact on the capital costs of coal ash impoundments as those impoundments have already been constructed, and, to the extent

NEM DER may avoid the potential expansion of on-site landfills, the value Ms. Glick recommends would not begin to accrue until 2023 at the earliest, assuming landfill expansion is actually needed at that point in time. He went on to state that current trends show declines in coal usage due to the low price of natural gas, which may delay or eliminate the need for landfill expansions. Witness Snider testified, therefore, that ascribing a value today would be premature and inappropriate.

In surrebuttal, Witness Glick recommended that the Company separately state coal ash handling costs in the Environmental Costs category of the value of NEM DER. Witness Glick also testified that NEM DER can delay the need for landfill expansion, and that such delay has a quantifiable value.

We find that avoided variable operational costs resulting from NEM DER are appropriately included within the Avoided Energy component. The NEM DER Settlement Agreement approved by the Commission in Docket No. 2014-246-E provides that avoided costs that may be included in the Environmental Costs category “might be accounted for in the Avoided Energy component, but, if not, should be accounted for separately.” Because variable operational costs associated with coal ash handling are already included in the Avoided Energy component calculation of NEM DER for DEC, it is unnecessary to separately account for these costs.

We agree with Witness Snider that, because DEC’s coal ash impoundments have already been constructed, NEM DER will have no impact on the capital costs associated with these facilities. Should we find, in a future proceeding, that NEM DER are permitting DEC to avoid a quantifiable amount of capital costs related to coal ash landfills, we will consider the assignment of a value for these costs at that time.

E. FINDINGS OF FACT AND CONCLUSIONS OF LAW

As reflected in the evidence of record, no party challenged the reasonableness or prudence of DEC's fuel purchasing practices and policies, plant operations, and fuel inventory management during the Review Period. Based upon the evidence and testimony of the witnesses, the Commission finds and concludes that DEC's fuel purchasing practices and policies, plant operations, and fuel inventory management during the Review Period are consistent with the statutory requirements of S.C. Code Ann. § 58-27-865 (2015), and are just, reasonable, and prudent.

The Commission finds that the methodology for determining the environmental cost component of the fuel factor and the methodology for allocation and recovery of the capacity-related cost component of the fuel factor (which includes purchased power capacity costs under the Public Utility Regulatory Policies Act of 1978 and natural gas transportation and storage costs) used by DEC in this proceeding are consistent with the statutory requirements of S.C. Code Ann. § 58-27-865 (2015), and are just, reasonable, and prudent.

As reflected in the evidence of record, no party challenged the reasonableness or prudence of DEC's proposed fuel factor (including the components recovering fuel costs, variable environmental costs, capacity-related costs, and DERP costs), as revised and shown in Witness McGee's Revised Exhibits filed on September 10, 2018. Based upon the evidence and testimony of the witnesses, the Commission therefore finds and concludes that DEC's proposed fuel factor is consistent with the statutory requirements of S.C. Code Ann. § 58-27-865 (2015), and is just, reasonable and prudent.

The Commission finds that the 2018 component values for NEM DER, as shown in Table 1 of Witness Snider's direct testimony, comply with the NEM methodology approved by the

Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. § 58-40-10 *et seq.* (2015).

The Commission finds that the revisions to the 2018 Renewable Net Metering Rider RNM tariff sheet—which was pre-filed as Exhibit 1 to Witness Martin’s direct testimony—are lawful, just and reasonable. The DERP Charges as filed in witness McGee’s supplemental testimony are reasonable and comply with S.C. Code Ann. §§ 58-27-865, 58-39-140 and 58-39-150.

Having heard the testimony of the witnesses and representations of counsel, and after careful review of the matters and the Stipulation, the Commission finds that approval of the terms set out in the Stipulation is consistent with the standards for fuel review proceedings conducted pursuant to S.C. Code Ann. § 58-27-865 (2015), and that the Stipulation is just, reasonable, and supported by the substantial evidence in the record. The Stipulation’s terms allow recovery in a precise and prompt manner while assuring public confidence and minimizing abrupt changes in charges to customers. As such, approval of the Stipulation is in the public interest as a reasonable resolution of the issues addressed therein. The Stipulation, as submitted and approved, is attached to this Order as Order Exhibit 1.

IT IS THEREFORE ORDERED THAT:

1. The fuel purchasing practices, plant operations, and fuel inventory management of DEC related to the historical fuel costs and revenues for the period ending May 31, 2018, are prudent.
2. The Stipulation is incorporated into this Order by reference and is found to be a reasonable resolution of the issues addressed therein and to be in the public interest after review of the evidence, and is hereby adopted and approved.

3. The methodologies used by the Company to calculate its environmental cost component and the capacity related cost component of the fuel factor are reasonable and prudent for the review and billing period.

4. The Company's revisions to the 2018 Renewable Net Metering Rider RNM are lawful, just and reasonable, and shall become effective with service rendered on and after October 1, 2018.

5. The Company's calculation and method of accounting for avoided and incremental costs for NEM during the review period were reasonable and prudent, are consistent with the methodology approved by the Commission in Order No. 2015-194, and comply with S.C. Code Ann. § 58-40-10 *et seq.* (2015).

6. The 2018 component values for the NEM DER comply with the NEM methodology approved by the Commission in Order No. 2015-194, and satisfy the requirements of S.C. Code Ann. § 58-40-10 *et seq.* (2015).

7. DEC shall set its Residential, General Service/Lighting and Industrial base fuel factor at 1.9648 cents per kWh (not including applicable Environmental Fuel, Avoided Capacity, and DERP Avoided Cost Components) effective for service rendered beginning October 1, 2018, extending through service rendered September 30, 2019.¹⁰

8. DEC shall set its Environmental Fuel Component at 0.0166 cents per kWh for the Residential class, 0.0193 cents per kWh for the General Service/Lighting class, and 0.0168 cents

¹⁰ The base fuel factors, environmental fuel component, avoided capacity component, DERP avoided cost component, and DERP Charge will be adjusted for billing purposes to include gross receipts tax and regulatory fees.

per kWh for the Industrial class effective for service rendered beginning October 1, 2018, extending through service rendered September 30, 2019.

9. DEC shall set its Avoided Capacity Component at 0.1274 cents per kWh for the Residential class, 0.1158 cents per kWh for the General Service/Lighting class, and 0.0901 cents per kWh for the Industrial class effective for service rendered beginning October 1, 2018, extending through service rendered September 30, 2019.

10. DEC shall set its DERP Avoided Cost Component at 0.0006 cents per kWh for the Residential class, 0.0005 cents per kWh for the General Service/Lighting class, and 0.0004 cents per kWh for the Industrial class effective for service rendered beginning October 1, 2018, extending through service rendered September 30, 2019.

11. DEC shall set its DERP Charge at \$0.89 per month for the Residential class, \$4.30 per month for the Commercial class, and \$100.00 per month for the Industrial class, including Gross Receipts Tax.

12. DEC shall file the South Carolina Retail Adjustment for Fuel, Capacity-Related, Variable Environmental, and DERP Avoided Capacity Costs Rider; Renewable Net Metering Rider RNM tariff sheet; and all other retail Tariffs with the Commission and a copy with ORS within ten (10) days of receipt of this Order. The revised tariffs should be electronically filed in a text searchable PDF format using the Commission's Docket Management System (<https://dms.psc.sc.gov>). An additional copy should be sent via e-mail to etariff@psc.sc.gov to be included in the Commission's ETariff system (<https://etariff.psc.sc.gov>). DEC shall provide a reconciliation of each tariff rate change approved as a result of this order to each tariff rate revision filed in the ETariff system. Such reconciliation shall include an explanation of any differences and

be submitted separately from the Company's ETariff filing. Each tariff sheet shall contain a reference to this Order and its effective date at the bottom of each page.

13. DEC shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865.

14. DEC shall continue to file the monthly reports as previously required. In an effort to keep the ORS and DEC's customers informed of the (over)/under recovery balances related to fuel costs and of DEC's commercially reasonable efforts to forecast the expected fuel factor to be set at its next annual fuel proceeding, DEC will provide to ORS, SCEUC, and where applicable, its other customers the following information:

- a. copies of the monthly fuel recovery reports currently filed with the Commission showing the monthly (over)/under-recovery and cumulative balances through the end of the forecast period and including reports of itemized monthly actual DERP incremental and avoided costs as well as monthly reports reflecting the (over)/under cumulative balances of DERP avoided and incremental costs;
- b. forecasts of the expected fuel factors to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of prices for uranium, natural gas, coal, oil and other fuel required for generation of electricity. Such forecasts will be provided in the 4th quarter of the calendar year prior to the next annual fuel proceeding and in the 2nd quarter of the calendar year of the Company's next annual fuel proceeding. DEC will use commercially reasonable efforts in making these forecasts. To the extent that the forecast data required hereunder is confidential, any party or customer, other than ORS, that requests forecasted fuel data will have to sign a non-

disclosure agreement agreeing to protect the data from public disclosure and to only disclose it to employees or agents with a need to be aware of this information; and,

- c. forecasts of the expected DERP Charge to be set at its next annual fuel proceeding based upon DEC's historical (over)/under-recovery to date and DEC's forecast of DERP incremental and avoided costs. Forecasts will be provided in the same manner as in (b) above.

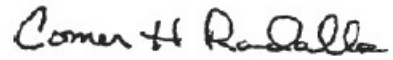
15. DEC shall continue to examine and make adjustments as necessary to its natural gas hedging program. DEC shall also provide monthly natural gas hedging reports to ORS.

16. DEC shall, by rate class, account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit.

17. DEC shall submit monthly reports to the Commission and ORS of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater.


18. This Order shall remain in full force and effect until further order of the Commission.

BY ORDER OF THE COMMISSION:



Comer H. "Randy" Randall, Chairman

ATTEST:



Jocelyn Boyd, Chief Clerk/Administrator

BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2018-3-E

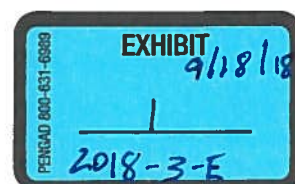
In the Matter of:)
)
Annual Review of Base Rates for Fuel)
Costs for Duke Energy Carolinas, LLC)
)
_____)

STIPULATION

Duke Energy Carolinas, LLC (“DEC”), the South Carolina Energy Users Committee (“SCEUC”), and the South Carolina Office of Regulatory Staff (“ORS”) (collectively, the “Parties”) hereby enter into the following stipulations. As a consequence of these stipulations and conditions, SCEUC and ORS do not oppose the amount of under-collection DEC proposes to recover through its fuel adjustment clause in this proceeding, and the Parties stipulate and agree as follows:

1. SCEUC and ORS do not oppose the Public Service Commission of South Carolina (“Commission”) granting DEC’s proposed amount of recovery in this proceeding, provided the conditions contained within this stipulation are met.

2. The Parties stipulate and agree that the proposed fuel factors set forth shown on DEC Witness Kim McGee’s Revised Exhibit 1, Line 13 are correct, appropriate, and consistent with S.C. Code Ann. § 58-27-865. The Parties also stipulate and agree that the DERP incremental charges set forth on Exhibit 1 to the testimony of ORS witness Sarah Johnson (as incorporated into McGee’s Revised Exhibit 1, Line 18) are correct, appropriate and consistent with the provisions of Act 236 of 2014.



3. SCEUC will request that it be allowed to submit the testimony of its witness Kevin O'Donnell into the record without O'Donnell being present to testify. The ORS and DEC agree that they will not oppose that request. SCEUC stipulates and agrees to withdraw the recommendation for additional reporting requirements contained in Section II of O'Donnell's testimony.

4. DEC stipulates and agrees to limit the total average bill increase to no more than 5 percent for the one-year billing period beginning October 1, 2018.

5. The Parties stipulate and agree that, in order to effect a cap of 5-percent on bill increases resulting from the fuel proceeding, DEC will reduce projected fuel costs by \$34 million during the billing period October 2018 through September 2019 and will defer recovery of the actual over/under recovery balance to October 1, 2019 through its 2019 fuel proceeding.

6. The Parties stipulate and agree that DEC will charge and accrue interest monthly on the amount DEC would have billed but for the deferral. The Parties further stipulate and agree that the applicable interest rate used to calculate the carrying costs will be the 3-year U.S. Government Treasury Note, as reported in the Wall Street Journal, either in its printed edition or on its website, plus an all-in spread of 65 basis points (0.65 percentage points), and that the applicable period during which carrying costs will be applied begins October 1, 2018 and ends September 30, 2019.

7. DEC agrees that, pursuant to S.C. Code Ann. §58-27-865(F), its achievement of a 92.5% net capacity factor for its nuclear units in a given review period creates a rebuttable presumption that it made every reasonable effort to minimize cost associated with the operation of its nuclear generation system, but that presumption does not preclude the ORS or other parties from examining the operation of the DEC nuclear generation system and offering evidence in an

effort to rebut the presumption. With respect to the July 24, 2017 outage at Oconee Unit 3 (“Oconee 3 Outage”), DEC and ORS stipulate that the outage was not the result of unreasonable operation of the unit by DEC and that the replacement costs should not be disallowed. The ORS withdraws its recommendation in the direct testimonies and exhibits of Matthew Schellinger and Anthony Briseno that the Oconee Unit 3 Outage replacement costs be disallowed. The rebuttal testimony of DEC witness Steven Capps and the surrebuttal testimony of ORS witness Matthew Schellinger is withdrawn.

8. The Parties stipulate and agree that this Stipulation is reasonable, in the public interest, and in accordance with law and regulatory policy.

9. This Stipulation contains the complete agreement of the Parties as related to the subjects discussed herein. The Parties agree that, by signing this Stipulation, it will not constrain, inhibit, or impair their arguments or positions held in future proceedings. If the Commission declines to approve the Stipulation in its entirety, then any of the Parties may withdraw from the Stipulation without penalty within three (3) days of receiving notice of the Commission’s decision by providing written notice of withdrawal via electronic mail to all parties within that time period.

10. This Stipulation shall be effective upon execution of the Parties and shall be interpreted according to South Carolina law.

11. This Stipulation in no way constitutes a waiver or acceptance of the position of any of the Parties concerning the requirements of S.C. Code Ann. § 58-27-865 in any future proceeding.

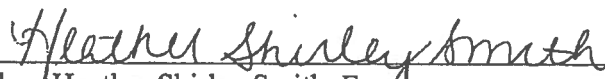
12. This Stipulation shall bind and inure to the benefit of each of the signatories hereto and their representatives, predecessors, successors, assigns, agents, shareholders, officers, directors (in their individual and representative capacities), subsidiaries, affiliates, parent

corporations, joint ventures, heirs, executors, administrators, trustees, and attorneys.

13. Each party acknowledges its consent and agreement to this Stipulation by authorizing its counsel to affix his or her signature to this document where indicated below. Counsel's signature represents his or her representation that his or her client has authorized the execution of this Stipulation. Facsimile signatures and e-mail signatures shall be as effective as original signatures to bind any party. This document may be signed in counterparts, with the various signature pages combined with the body of the document constituting an original and provable copy of this Stipulation.

[PARTY SIGNATURE TO FOLLOW ON SEPARATE PAGES]

DUKE ENERGY CAROLINAS, LLC

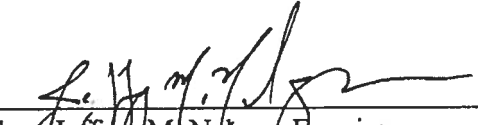

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